REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

In the specification, paragraphs [0023], [0034] and [0036] are being amended.

Claim 24 is requested to be cancelled without prejudice. Claim 18 is currently being amended. Claims 25-29 are being added. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-23 and 25-29 are now pending in this application.

Objection to the Specification

On page 2 of the Office Action, the specification was objected to because the abstract was not on a separate page. In the response to the objection, Applicants submit an abstract on a separate page. Withdrawal of the objection is respectfully requested.

Claim Rejections under 35 U.S.C. § 102

On page 2 of the Office Action, Claims 1-24 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,854,593 (Dykema).

Independent Claims 1 and 10

With respect to independent Claim 1, the Examiner stated that:

> Dykema et al. teaches a trainable transceiver (55) comprising an antenna (59) coupled to a receiver (col. 5 lines 51-65). The receiver is considered to be wideband because it is adjusted for receiving a wide range of frequencies (col. 14 lines 59-67).

Dykema et al. teaches the receiver is configured to receive a RF
control signal from the remote control transmitter and the RF
control signal includes a control code, a RF carrier frequency (col.
6 lines 14-20) and set of data characteristic relating to whether or
not the code is variable (col. 18 lines 15-30). Dykema at al.
teaches a control circuit (57) coupled to the receiver having a
training mode for identifying and storing the control code of the RF
control signal in order to identify the frequency associated with the
received control signal from the transmitter and the data
characteristic of the received control signal (col. 18 lines 15-20).

In addition to the reasons provided above with respect to Claim 1, the Examiner stated
that, regarding Claim 10:

Dykema et al. also teaches identifying the frequency of the control
signal based on the data characteristic of the number of rising
edges appearing in the received signal over a period of
predetermined time interval (col. 17 lines 1-14).

Claims 1 and 10 are in independent form and recite, in combination with other elements,
a "wideband receiver" and a "control circuit … configured … to identify at least one RF
frequency associated with the RF control signal based on the at least one data characteristic."
Claims 2-9 depend from independent Claim 1. Claims 11-17 depend from Claim 10.

With respect to the "wideband receiver" recited in Claims 1 and 10, the Examiner stated
that "[t]he receiver [of Dykema]is considered to be wideband because it is adjusted for receiving
a wide range of frequencies" as shown in column 14 lines 59-67 of <u>Dykema</u>, which states:

Microcontroller 57 tunes antenna 59 by providing antenna control
data to D/A converter 72. The antenna control data preferably has
an eight-bit value, which may be computed from the frequency of
VCO 73 or read from a table including a list of eight-bit values
associated with various frequencies that may be output from VCO
73. In general, the voltage output from D/A converter 72 is
controlled to vary from 0.5 to 4.5 V linearly with respect to a 220
to 440 MHz frequency range.

The paragraph of <u>Dykema</u> cited by the Examiner describes a D/A converter providing 256 output voltage levels (eight bits) to tune the antenna to 256 different frequency bands within a 220 to 440 MHz frequency range. The paragraph, however, says nothing about the receiver. The Examiner concludes that the receiver must be a wideband receiver configured to accept all of the frequencies in the range over which the antenna is tunable. Applicants respectfully disagree with the Examiner's conclusion. A wideband receiver, similar to a wide band antenna, is one that can simultaneously receive and process signals over a wide range of frequencies. A tunable receiver is typically understood to receive and process a narrow band of frequencies to which the receiver is selectively tuned.

<u>Dykema</u> discloses a tunable receiver being used with a tunable antenna. <u>Dykema</u> states that:

> [t]he trainable transmitter further includes **a tunable RF circuit** coupled to the antenna **for receiving RF signals received by the antenna**…. The **RF circuit is selectively tuned to a frequency** corresponding to a frequency control signal applied to the frequency control terminal and provides any data code present in a received RF signal at the data output terminal whenever the RF carrier frequency of the received RF signal corresponds to the **frequency at which the RF circuit is tuned**…. When in the training mode, the control circuit initiates a training sequence by applying a first frequency control signal to the frequency control terminal to **tune the RF circuit to the first frequency** and by **subsequently** applying a second frequency control signal to the frequency control terminal to **tune the RF circuit to the second frequency**.

(Dykema at col. 3 line 57 to col. 4 line 10; emphasis added). According to this paragraph, the RF circuit, which includes the receiver, is selectively tuned for receiving RF signals received by the antenna. Applicants respectfully submit that <u>Dykema</u>'s "tunable RF circuit … for receiving RF signals received by the antenna" is not the same as a "wideband receiver" as recited in Claims 1 and 10 of the present application.

Thus, Dykema does not identically disclose, among other elements, a "wideband receiver" as recited in independent Claims 1 and 10. The rejection of Claims 1 and 10 over Dykema is improper. Claims 1 and 10 are patentable over Dykema.

With respect to the "control circuit … configured … to identify at least one RF frequency associated with the RF control signal based on the at least one data characteristic" recited in Claims 1 and 10, the Examiner stated that "Dykema at al. teaches a control circuit (57) coupled to the receiver having a training mode for identifying and storing the control code of the RF control signal in order to identify the frequency associated with the received control signal from the transmitter and the data characteristic of the received control signal" as shown in column 18 lines 15-20 of Dykema, which states that (emphasis added):

> [t]o determine whether the received code may be a variable code, microcontroller 57 may **check whether the identified frequency** is one used with time-varying codes. Additionally, microcontroller 57 may be able to identify a variable code based upon the number of pulses in the code since variable codes may have a higher number of bits. To confirm the presence of a variable code, microcontroller 57 may prompt the user to re-actuate the transmit button on the remote transmitter and check whether the code included in the second transmitted signal is the same as that in the first. Alternatively, the code may dynamically change within a single actuation of the transmit button on the remote transmitter or the characteristics of the pulses themselves may indicate that the code is a variable code, in which case microcontroller 57 could determine that the received code is a variable code.

The paragraph of Dykema cited by the Examiner describes determining whether the received code is a variable code after the frequency of the received signal has been identified. A variable code is a series of bits that vary according to a predefined algorithm, therefore, determining a variable code is not the same as determining a frequency of the received signal. Further, determining whether the received code is a variable code **after the frequency of the received signal has been identified** is not the same as a "control circuit … configured … to

identify at least one RF frequency associated with the RF control signal **based on the at least one data characteristic**" as recited in Claims 1 and 10.

Thus, <u>Dykema</u> does not identically disclose, among other elements, a "control circuit … configured … to identify at least one RF frequency associated with the RF control signal based on the at least one data characteristic" as recited in independent Claims 1 and 10. The rejection of Claims 1 and 10 over <u>Dykema</u> is improper. Claims 1 and 10 are patentable over <u>Dykema</u>.

Dependent Claims 2-9, which depend from independent Claim 1, are also patentable for at least the same reasons as Claim 1. Dependent Claims 11-17, which depend from independent Claim 10, are also patentable for at least the same reasons as Claim 10.

Independent Claim 18

With respect to independent Claim 18, the Examiner stated that:

> Dykema et al. teaches initiating a training sequence (col. 4 lines 27-32); identifying and storing a control code of the RF control signal (col. 6 lines 14-20, col. 17 lines 15-20); identifying the data characteristic of the RF control signal (col. 18 lines 15-20) and identifying a frequency based on a data characteristic if the number of rising edges appearing in the received signal over a period of a predetermined time interval (col. 17 lines 1-14).

The Examiner stated that <u>Dykema</u> teaches "identifying a frequency based on a data characteristic of the number of rising edges appearing in the received signal over a period of a predetermined time interval" as shown in column 17 lines 1-14 of <u>Dykema</u>, which states that (emphasis added):

> [i]f microcontroller 57 does not receive a code signal from integrator 84 for the initial frequency, microcontroller 57 in the next loop selects another frequency and provides phase-locked loop circuit with frequency control data corresponding to the new frequency. Microcontroller 57 continues to select new frequencies in this manner until a code signal is detected as indicated by a signal from integrator 84. Microcontroller 57 **affirms the presence**

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of a code signal using a verification routine, which counts the number of rising edges appearing in any signal received from integrator 84 during a predetermined time interval and **determines that data is present when the counted number of rising edges exceeds a threshold level**. The verification subroutine is described in greater detail below.

The paragraph of <u>Dykema</u> cited by the Examiner describes a verification process for verifying that an identified frequency has a code signal. Once the frequency is identified, the verification routine determines whether the signal received at that frequency is data or mere noise. The verification routine simply indicates that a signal of some sort is present, as opposed to noise, if a predetermined number of rising edges occur within a predetermined time interval. Verifying that an identified frequency has a code signal is not the same as "identifying at least one data characteristic from a set of data characteristics for the RF control signal" and "identifying at least one RF frequency based on the at least one data characteristic" as recited in Claim 18. Further, verifying the mere presence of a signal, as opposed to noise, is not the same as "identifying at least one data characteristic from a set of data characteristics for the RF control signal" and "identifying at least one RF frequency based on the at least one data characteristic" as recited in Claim 18.

Thus, <u>Dykema</u> does not identically disclose, among other elements, "identifying at least one data characteristic from a set of data characteristics for the RF control signal" and "identifying at least one RF frequency based on the at least one data characteristic" as recited in independent Claim 18. The rejection of Claim 18 over <u>Dykema</u> is improper. Claim 18 is patentable over <u>Dykema</u>.

Dependent Claims 19-23, which depend from independent Claim 18, are also patentable for at least the same reasons as Claim 18.

The Applicants respectfully request withdrawal of the rejection of Claims 1-23 under 35 U.S.C. § 102(b).

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New Claims

Claim 25 depends from Claims 1 and is allowable for at least the same reasons as Claim 1. Claim 26 depends from Claims 10 and is allowable for at least the same reasons as Claim 10. Claim 27 depends from Claims 18 and is allowable for at least the same reasons as Claim 18. Furthermore, Applicants respectfully submit that Dykema does not disclose, teach or suggest "selecting the at least one RF frequency from a pre-stored list of frequencies based on the at least one data characteristic" as recited in Claims 25-27.

Claim 28 depends from Claims 18 and is allowable for at least the same reasons as Claim 18. Furthermore, Dykema does not disclose, teach or suggest "identifying a manufacturer of the device based on the at least one data characteristic, wherein identifying the at least one RF frequency comprises identifying at least one RF frequency based on the manufacturer of the device and the at least one data characteristic" as recited in Claim 28.

Claim 29 is drafted in independent form. Dykema does not disclose, teach or suggest "wherein a wideband receiver coupled to an antenna receives the RF control signal" or "identifying a manufacturer of the device from a pre-stored list of manufacturers based on the at least one data characteristic" and "selecting at least one RF frequency from a pre-stored list of frequencies based on the identified manufacturer" as recited in Claim 29.

Since Dykema does not disclose, teach or suggest the limitation of Claims 25-29, Applicants respectfully request allowance of Claims 25-29 as presented.

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Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date ____ August 11, 2008 ____   By ___ / Karl F. Reichenberger / ___

FOLEY & LARDNER LLP   Karl F. Reichenberger
Customer Number: 26371   Attorney for Applicant
Telephone: (414) 319-7347   Registration No. 60,726
Facsimile: (414) 297-4900